



# **STIC Search Report**

## **EIC 2100**

**STIC Database Tracking Number: 160070**

**TO: Kenneth Tang**  
**Location: RND 5B59**  
**Art Unit : 2195**  
**Thursday, July 21, 2005**

**Case Serial Number: 09/389201**

**From: David Holloway**  
**Location: EIC 2100**  
**RND 4B19**  
**Phone: 2-3528**

**david.holloway@uspto.gov**

### **Search Notes**

Dear Examiner Tang,

Attached please find your search results for above-referenced case.  
Please contact me if you have any questions or would like a re-focused search.

David

Set	Items	Description
S1	5091582	TOP? ? OR ORDINAL? OR FIRST? OR HIGHEST? OR BEGINNING? OR - INITIAL? OR PRIMARY OR PRIME OR UPPER? OR LEAD?
S2	2517221	TASK? OR EVENT? OR ACTIVITY OR PROCESS? ? OR ACTIVITIES OR JOB OR JOBS OR EXECUTABLE
S3	70745	(REMOV? OR DELET? OR EXTRACT? OR DEQUEUE? OR DELIST? OR POP OR POPS OR POPPING OR ELIMINATE? OR DETACH?) (3N) (COMPLET? OR FINISH? OR END OR ENDS OR CONCLUD? OR TERMINAT? OR ACCOMPLISH? OR ACHIEV?)
S4	6349609	DISPLAY? OR SHOW? OR VIEW? OR WATCH? OR OUTPUT? OR OUT() (P- UT OR PUTS)
S5	1123545	LIST OR LISTS OR STACK? OR QUEUE? OR TABLE? OR ARRAY? OR M- ATRIX? OR MATRICES? OR TREE? OR BTREE?
S6	160	S5 AND S1 AND S2 AND S3 AND S4
S7	18	S1(2N)S5 AND S6
S8	3	S6 AND IC=G06F-009
S9	2	S8 NOT S7
S10	11	S6 AND IC=G06F
S11	8	S10 NOT (S9 OR S8)
S12	2	S2(2N)S5 AND (LIFO OR LAST() IN)
S13	14	S3 AND (LIFO OR FIFO)
S14	16	S12 OR S13
S15	7	S14 AND IC=G06F
S16	15	S15 OR S12 OR S11
S17	5	S16 NOT (S10 OR S12)
S18	93	S1(3N)S2 AND S3 AND S4
S19	4	S18 AND IC=G06F
S20	2	S19 NOT (S17 OR S10 OR S12)

File 347:JAPIO Nov 1976-2005/Feb(Updated 050606)

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File 350:Derwent WPIX 1963-2005/UD,UM &UP=200546

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9/5/1 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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015902924 \*\*Image available\*\*  
WPI Acc No: 2004-060764/200406  
XRPX Acc No: N04-049207

**Client and server processes managing method, involves receiving notification to indicate termination of client process, removing identification from list, and performing process management operation in response to change of list**

Patent Assignee: MICROSOFT CORP (MICT )  
Inventor: BAKIN D; NICHOLSON A L; SANDADI U; SAUNTRY D; SHEPARD M  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030225870	A1	20031204	US 2002156463	A	20020528	200406 B

Priority Applications (No Type Date): US 2002156463 A 20020528

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20030225870	A1	15	G06F-015/173	

Abstract (Basic): US 20030225870 A1

NOVELTY - The method involves receiving an **initial** request from a client **process** for a service provided by a server **process** to add a client **process** identification corresponding to the client **process** to a **list**. A notification is received to indicate the termination of the client **process** and the identification is removed. A **process** management operation is performed in response to a change of the **list**

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a computer-readable medium including computer- **executable** instructions for managing a client **process** and a server **process** referenced by the client **process**

(2) a computer system application program execution infrastructure facilitating managing execution of client processes and a referenced server **process**

USE - Used for managing client and server processes operating within separate **process** spaces within a computer system.

ADVANTAGE - The method manages the client and server component-based processes and hence ensures desirable consumption of limited computer system resources.

DESCRIPTION OF DRAWING(S) - The drawing **shows** a flowchart of a set of steps performed in response to a client **process** **initially** requesting user of a server component interface.

pp; 15 DwgNo 4/6

Title Terms: CLIENT; SERVE; **PROCESS** ; MANAGE; METHOD; RECEIVE; NOTIFICATION; INDICATE; TERMINATE; CLIENT; **PROCESS** ; REMOVE; IDENTIFY; **LIST** ; PERFORMANCE; **PROCESS** ; MANAGEMENT; OPERATE; RESPOND; CHANGE; **LIST**

Derwent Class: T01

International Patent Class (Main): G06F-015/173

International Patent Class (Additional): **G06F-009/46** ; G06F-015/16

File Segment: EPI

17/5/4 (Item 2 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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012979556 \*\*Image available\*\*  
WPI Acc No: 2000-151409/200014  
XRPX Acc No: N00-112395

Spool file execution order control method for network printer - involves reading spool file corresponding to spool information exceeding set-time, from queue, and sending it to printing module after which deletion of process finished spool information is performed

Patent Assignee: NIPPON DENKI ENG KK (NIDE )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2000010746	A	20000114	JP 98173538	A	1998061	200014 B

Priority Applications (No Type Date): JP 98173538 A 19980619

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2000010746	A		6 G06F-003/12	

Abstract (Basic): JP 2000010746 A

NOVELTY - If spool file information over set-up time exists, and spool file of higher priority does not exist, the spool file (12) equivalent to the spool file information is read from queue (14) of **FIFO**. Spool file is then sent to printing module (15). Spool file information corresponding to sending and processing **finished** file is **deleted**, finally. DETAILED DESCRIPTION - When spool file information over a setup time does not exist, it is detected whether spool file (12) of high priority level is sent from priority level management unit. The spool file is then read and sent to printing module (15).

USE - For network printer.

ADVANTAGE - Usual printing demand is not processed, until all high priority demands are finished. Hence avoids extreme time variation in printing. DESCRIPTION OF DRAWING(S) - The figure shows block diagram of print server. (12) Spool file; (14) Queue; (15) Printing module.

Dwg.2/7

Title Terms: SPOOL; FILE; EXECUTE; ORDER; CONTROL; METHOD; NETWORK; PRINT; READ; SPOOL; FILE; CORRESPOND; SPOOL; INFORMATION; SET; TIME; QUEUE; SEND ; PRINT; MODULE; AFTER; DELETE; PROCESS; FINISH; SPOOL; INFORMATION; PERFORMANCE

Derwent Class: P75; T01

International Patent Class (Main): G06F-003/12

International Patent Class (Additional): B41J-029/38

File Segment: EPI; EngPI

Set	Items	Description
S1	10230475	TOP? ? OR ORDINAL? OR FIRST? OR HIGHEST? OR BEGINNING? OR - INITIAL? OR PRIMARY OR PRIME OR UPPER? OR LEAD?
S2	9247564	TASK? OR EVENT? OR ACTIVITY OR PROCESS? ? OR ACTIVITIES OR JOB OR JOBS OR EXECUTABLE
S3	61256	(REMOV? OR DELET? OR EXTRACT? OR DEQUEUE? OR DELIST? OR POP OR POPS OR POPPING OR ELIMINATE? OR DETACH?) (3N) (COMPLET? OR FINISH? OR END OR ENDS OR CONCLUD? OR TERMINAT? OR ACCOMPLISH? OR ACHIEV?)
S4	11420075	DISPLAY? OR SHOW? OR VIEW? OR WATCH? OR OUTPUT? OR OUT() (P- UT OR PUTS)
S5	3731775	LIST OR LISTS OR STACK? OR QUEUE? OR TABLE? OR ARRAY? OR M- ATRIX? OR MATRICES? OR TREE? OR BTREE?
S6	169	S5 AND S1 AND S2 AND S3 AND S4
S7	2204	S2(4N)S3
S8	17	S6 AND S7
S9	12	RD (unique items)
S10	4	S9 NOT PY>1999
S11	83152	S5(3N) (MANAGE? OR MANAGING OR ADMINIST? OR CONTROL?)
S12	7	S6 AND S11
S13	7	S4(2N)S5 AND S6
S14	14	(S12 OR S13) NOT PY>1999
S15	13	RD (unique items)
S16	13	S15 NOT S10
File	8: Ei	Compendex(R) 1970-2005/Jul W2 (c) 2005 Elsevier Eng. Info. Inc.
File	35:	Dissertation Abs Online 1861-2005/Jun (c) 2005 ProQuest Info&Learning
File	65:	Inside Conferences 1993-2005/Jul W3 (c) 2005 BLDSC all rts. reserv.
File	2:	INSPEC 1969-2005/Jul W2 (c) 2005 Institution of Electrical Engineers
File	94:	JICST-EPlus 1985-2005/May W5 (c) 2005 Japan Science and Tech Corp(JST)
File	111:	TGG Natl.Newspaper Index(SM) 1979-2005/Jul 20 (c) 2005 The Gale Group
File	6:	NTIS 1964-2005/Jul W2 (c) 2005 NTIS, Intl Cpyrght All Rights Res
File	144:	Pascal 1973-2005/Jul W2 (c) 2005 INIST/CNRS
File	434:	SciSearch(R) Cited Ref Sci 1974-1989/Dec (c) 1998 Inst for Sci Info
File	34:	SciSearch(R) Cited Ref Sci 1990-2005/Jul W3 (c) 2005 Inst for Sci Info
File	99:	Wilson Appl. Sci & Tech Abs 1983-2005/Jun (c) 2005 The HW Wilson Co.
File	95:	TEME-Technology & Management 1989-2005/Jun W2 (c) 2005 FIZ TECHNIK

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S1	5091582	TOP? ? OR ORDINAL? OR FIRST? OR HIGHEST? OR BEGINNING? OR - INITIAL? OR PRIMARY OR PRIME OR UPPER? OR LEAD?
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S7	18	S1(2N)S5 AND S6
S8	3	S6 AND IC=G06F-009
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S10	11	S6 AND IC=G06F
S11	8	S10 NOT (S9 OR S8)
S12	2	S2(2N)S5 AND (LIFO OR LAST() IN)
S13	14	S3 AND (LIFO OR FIFO)
S14	16	S12 OR S13
S15	7	S14 AND IC=G06F
S16	15	S15 OR S12 OR S11
S17	5	S16 NOT (S10 OR S12)
S18	93	S1(3N)S2 AND S3 AND S4
S19	4	S18 AND IC=G06F
S20	2	S19 NOT (S17 OR S10 OR S12)
S21	5668169	DEVICE? OR PERIPHERAL? OR HARDWARE? OR CONFIGURATION? OR T- OPOGRAPHY OR ARCHITECTURE
S22	19422	S3 AND S21
S23	3175	S2 AND S22
S24	1446	S23 AND (S1 OR S5)
S25	8	S24 AND IC=G06F-009
S26	46	S24 AND IC=G06F
S27	8	S25 NOT (S20 OR S17 OR S10 OR S12)
S28	38	S26 NOT S27
S29	31	S28 NOT AD=19990921:20010921
S30	22	S29 NOT AD=20010921:20030921
S31	22	S30 NOT AD=20030921:20050801

? show files

File 347:JAPIO Nov 1976-2005/Feb(Updated 050606)  
(c) 2005 JPO & JAPIO

File 350:Derwent WPIX 1963-2005/UD,UM &UP=200546  
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31/5/2 (Item 2 from file: 347)  
DIALOG(R) File 347:JAPIO  
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06253452 \*\*Image available\*\*  
DOCUMENT MANAGING **DEVICE** /METHOD AND STORAGE MEDIUM

PUB. NO.: 11-195031 [JP 11195031 A]  
PUBLISHED: July 21, 1999 (19990721)  
INVENTOR(s): YASHIRO SATORU  
APPLICANT(s): CANON INC  
APPL. NO.: 09-366740 [JP 97366740]  
FILED: December 26, 1997 (19971226)  
INTL CLASS: **G06F-017/30**

#### ABSTRACT

PROBLEM TO BE SOLVED: To provide a document managing **device** executing the processing of high processing cost when the working rate of a processor is low, reducing storage cost and realizing document registration/retrieval with low total cost.

SOLUTION: In the document managing **device**, the generation processing of a character index is executed in the case of a document registration **event**, the pointer of a document in the middle of processing is inserted into a word index non-processing **queue** and a document storage processing is executed on a secondary storage **device** 6. When a document retrieval **event** exists, retrieval is executed from the character index and retrieval is executed from the word index. The sum set of the retrieval results is obtained and the retrieval result is outputted to a display 2. When the **event** does not exist, the input of an operator does not exist and the **device** is not operated. When the word index generation non-processing **queue** exists at that time, the word index generation processing is executed. The character index of the document whose processing is **terminated** is **deleted**.

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31/5/10 (Item 1 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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014581378 \*\*Image available\*\*  
WPI Acc No: 2002-402082/200243  
XRPX Acc No: N02-315229

**Data processing monitoring apparatus for RDBMS, initiates action specified by action code included in monitoring request when action time is earlier to current time, and deletes requests corresponding to completed actions**

Patent Assignee: NCR CORP (NATC )  
Inventor: DEMPSEY M; ISHIMOTO G K; KAM W H; YANG A Y  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6356917	B1	20020312	US 98118413	A	19980717	200243 B

Priority Applications (No Type Date): US 98118413 A 19980717

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 6356917	B1	13	G06F-017/30		

Abstract (Basic): US 6356917 B1

NOVELTY - A monitoring request including action time, action code and destination, is registered in a monitor request **table** of database management system. An alert control module periodically processes the monitoring request to determine whether an action corresponding to the action code is to be taken. An action is initiated when the action time is earlier to current time. The monitoring requests corresponding to the **completed** actions are **deleted**.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (a) Data processing monitoring method;
- (b) Program storage **device** storing data processing monitoring program

USE - For monitoring data processing **jobs** directed to relational database management system (RDBMS) by management information system of companies.

ADVANTAGE - Progress of database **jobs** is informed to the operator, hence the **jobs** are taken off-line and altered. Allows additional data processing control and simplifies the design of software modules implementing the alert-raising functions by relieving them of the responsibility of keeping track of several database **jobs**.

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart explaining the operations performed by the **process** to provide alert and monitoring functions.

pp; 13 DwgNo 3A/5

Title Terms: DATA; **PROCESS** ; MONITOR; APPARATUS; INITIATE; ACTION; SPECIFIED; ACTION; CODE; MONITOR; REQUEST; ACTION; TIME; EARLY; CURRENT; TIME; DELETE; REQUEST; CORRESPOND; COMPLETE; ACTION

Derwent Class: T01

International Patent Class (Main): **G06F-017/30**

File Segment: EPI



31/5/12 (Item 3 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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012866222 \*\*Image available\*\*  
WPI Acc No: 2000-038055/200003  
XRPX Acc No: N00-028698

**Spin lock recovery method in multi-processing system**

Patent Assignee: LUCENT TECHNOLOGIES INC (LUCE )  
Inventor: BOHANNON P L; LIEUWEN D F; SILBERSCHATZ A  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5991845	A	19991123	US 96729658	A	19961021	200003 B

Priority Applications (No Type Date): US 96729658 A 19961021

**Patent Details:**

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 5991845	A	20	G06F-013/14	

Abstract (Basic): US 5991845 A

NOVELTY - A specific flag is set-up to indicate that recovery of **queue** structure in **process**. The **queue** structure is recovered, after all modification **activity** on the **queue** structure is completed. The specific flag is reset to indicate that recovery **process** is completed, after completion of clean-up **process** employed for **removing terminated** processes from **queue** structure.

DETAILED DESCRIPTION - A **queue** structure including a **process** currently having exclusive access to the lock, is generated. The processes for deciding the ownership of lock, is added to the **queue** structure. A pair of structure flags indicating **device** of one of processes to be added to **queue** structure, are set-up, respectively. A specific status flag indicating whether the **queue** structure is being restored, is monitored. The **queue** structure is not modified, if it is being restored. Clean-up **process** is performed, if one or more processes indicated by the **first** status flag are terminated, a clean-up **process** is performed to remove processes from the **queue** structure.

USE - For recovery of spin lock in multi-processing system, for restricting simultaneous access of shared memory.

ADVANTAGE - The algorithm used for scalable synchronization on shared memory multi-processors, also known as MCS algorithm, is improved by detecting and **removing terminated** processes from the **queue** structure. Ensures integrity of **queue** structure by reassembling the linked **list queue** structure after **removing** the failed or **terminated** processes, and assigning the exclusive accessed of the lock to a new **process** if the **process** which previously owned the lock is terminated. Suits for multiprocessing system employing automatically implemented **hardware** instruction such as swap and compare-and-swap, without the need for additional **hardware**. The collection of each **process** which requires pointer provides the system with overestimation of set of possible owners of spin lock and the collection of the status of each **process** locked flag provides an under-estimate of lock ownership.

DESCRIPTION OF DRAWING(S) - The figure illustrates the spin- lock recovery acquisition routine.

pp; 20 DwgNo 5/8

Title Terms: SPIN; LOCK; RECOVER; METHOD; MULTI; **PROCESS** ; SYSTEM  
Derwent Class: T01  
International Patent Class (Main): **G06F-013/14**  
International Patent Class (Additional): **G06F-013/00**  
File Segment: EPI

27/5/3 (Item 3 from file: 350)  
DIALOG(R) File 350: Derwent WPIX  
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012628356 \*\*Image available\*\*  
WPI Acc No: 1999-434460/199937  
XRPX Acc No: N99-323789

**Automatic quota unit for memory device of data processing system - has controller that stores lowest external storage device name to parameter file controller, with parameter modifying unit and deletes starting job name, with job completion notifying unit**

Patent Assignee: NIPPON DENKI FIELD SERVICE KK (NIDE )

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11175358	A	19990702	JP 97338668	A	19971209	199937 B
JP 3022829	B2	20000321	JP 97338668	A	19971209	200019

Priority Applications (No Type Date): JP 97338668 A 19971209

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 11175358	A	7	G06F-009/46	
JP 3022829	B2	7	G06F-009/46	Previous Publ. patent JP 11175358

Abstract (Basic): JP 11175358 A

NOVELTY - A controller (22) and a parameter modifying unit (23) store the lowest external storage device name to a parameter file (31). The controller and a job completion notifying unit (24) delete a starting job name from a quota management table (21), to receive a job completion notice. DETAILED DESCRIPTION - A quota management table (21) stores the quota management data on an external storage device (5), corresponding to a job. A parameter file (31) is used during start of a next job. A job starting unit (25) reads a job control language corresponding to the required starting job name to which a lowest external device name is added.

USE - For memory device of data processing system.

ADVANTAGE - Prevents reduction of input-output efficiency. Ensures efficient external storage devices. Eliminates input-output errors. Specifies lowest external device. Updates latest data. Does not increase unit cost. DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of an automatic quota unit. (5) External storage device; (21) Quota management table; (22) Controller; (23) Parameter modifying unit; (24) Job completion notifying unit; (25) Job starting unit; (31) Parameter file.

Dwg. 1/6

Title Terms: AUTOMATIC; UNIT; MEMORY; DEVICE; DATA; PROCESS; SYSTEM; CONTROL; STORAGE; LOW; EXTERNAL; STORAGE; DEVICE; NAME; PARAMETER; FILE; CONTROL; PARAMETER; MODIFIED; UNIT; DELETE; START; JOB; NAME; JOB; COMPLETE; NOTIFICATION; UNIT

Derwent Class: T01

International Patent Class (Main): G06F-009/46

International Patent Class (Additional): G06F-009/06

File Segment: EPI

*array  
input  
data*